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SELF.P-005-US
PATENT APPLICATION

ABSTRACT OF THE DISCLOSURE

1 An improved disposable glucose test strip for use
2 in a test meter of the type which receives a disposable test
3 strip and a sample of blood from a patient and performs an
4 electrochemical analysis is made using a working formulation
5 containing a filler, an enzyme effective to oxidize glucose,
6 e.g., glucose oxidase, and a mediator effective to transfer
7 electrons from the enzyme. The working formulation is
8 printed over a conductive carbon base layer to form a
9 working electrode. The filler, for example a silica filler,
10 is selected to have a balance of hydrophobicity and
11 hydrophilicity such that one drying it forms a two-
12 dimensional network on the surface of the conductive base
13 layer. The response of this test strip is essentially
14 temperature independent over relevant temperature ranges and
15 is substantially insensitive to the hematocrit of the
16 patient.